VII. DETOURS AND STREET CLOSURES (Figure VII-1)

Several elements, in addition to those indicated in Chapter I, are involved whenever it is deemed necessary before or during the course of a project to close an existing street and create a detour.

A. Permission and Notification

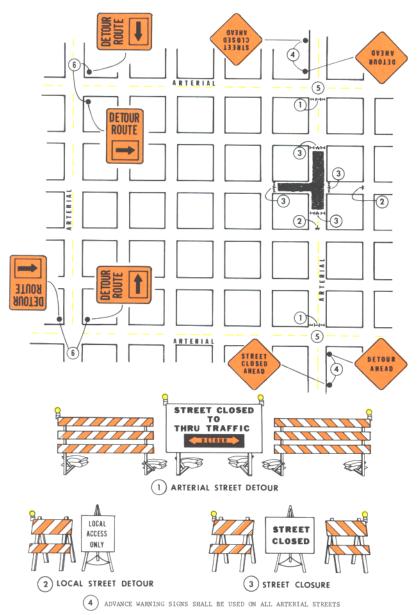
Notification \underline{shall} be given to and permission obtained from the Engineering Department, Street Use Division as outlined in Chapter II of this Manual. The Contractor or Utility \underline{shall} submit detour schedules and diagrams showing the steps required to maintain the detour during each phase of construction and showing the type, number and placement of all traffic control equipment. The submittal \underline{shall} include a tentative schedule indicating when specific signs, barricades and payement markings will be activated and deactivated.

B. Detour Requirements

All detours <u>shall</u> meet the following requirements in addition to any specified by the Traffic Engineer as being necessary for a particular project:

- 1. The detour shall be as simple and direct as possible.
- No turns <u>shall</u> be used on the detour other than those required to leave or enter the closed street or the parallel detour route.
- Streets less than 36 feet in width <u>shall</u> be used for detouring only one direction of traffic <u>unless</u> parking on one or more sides restricted.
- 4. All detour routes <u>shall</u> be protected by the proper temporary traffic control signs.
- When detouring a multi-lane street on a detour route less than four lanes in width, parking <u>shall</u> be prohibited on the detour route.
- 6. The detour route <u>shall</u> be clearly marked where it intersects other cross streets so that motorists will not turn prematurely into the construction area or closed portion of the street.
- Detour guide signing to next arterial street <u>shall</u> be approved by the Traffic Engineer.
- Advance warning signs to detours <u>shall</u> be used on arterial streets.

- 9. All temporary traffic control equipment used $\frac{\text{shall}}{\text{forth}}$ conform in design and placement to requirements set $\frac{\text{forth}}{\text{forth}}$ in this Manual.
- 10. All temporary traffic control equipment used for the street closure and or detour \underline{shall} be supplied and maintained by the Contractor and adjusted as work progresses.



- 5 TURN MOVEMENT RESTRICTIONS SHALL BE USED AS DIRECTED BY TRAFFIC ENGINEER
- 6 DETOUR GUIDE SIGNING TO NEXT ARTERIAL STREET SHALL BE PROVIDED AND DESIGNED BY TRAFFIC ENGINEER

FULL ROADWAY CLOSURE TYPICAL DETOUR PLAN

In addition, the Contractor shall be responsible for:

- Posting signs and barricades advising of the street closure at the nearest intersections away from the closed portion of the street and on all cross-streets in order to minimize unnecessary backing, turning around and maneuvering. Normally, such street closings should not exceed 2 blocks in length at anyone time.
- Providing and maintaining access for local residents as much as conditions permit.
- Maintaining access for all emergency vehicles, fire hydrants and alarm boxes along the closed route at all times.

C. Requirements Within Streets Closed to Through Traffic

When construction work is being conducted on a street which is closed to all but local traffic, the requirements for signing, particularly advanced signing, channelizing devices, lighting, and work area protection may differ from those indicated in this Manual.

Generally, the following guidelines should be adhered to, however, each situation should be evaluated on the basis of traffic volume and speed, familiarity of motorists with the roadway, and sight distance.

- All open excavations, ditches, spoil banks, etc., should be properly marked with barricades. Also, obstructions such as poles, curbing, etc., which due to the construction, are in a position where they could be struck by a vehicle should be properly identified by barricades, drums, etc.
- The path of the vehicle through the construction area should be properly identified by channelizing devices especially where the route has been altered or existing paint striping or channelization has been obscured or removed due to the construction activities. This is especially important at night.
- Where equipment is working in the traveled way during the daytime, advance signing is generally not necessary nor is delineation of the extent indicated in the illustrations. Generally, traffic cones or barricades outlining the immediate work area are sufficient to guide the motorists around the obstructions.
- 4. Where one lane must be used for two directions of travel a flagger shall be used. Where flaggers are deemed necessary, conformance with requirements discussed previously shall be adhered to. Situations as stated above, which require flagger control, shall be allowed during daytime only. At night such areas shall be clearly marked to allow two lanes of traffic.

- All signs, channelizing devices, and other equipment used for traffic control at night shall be properly reflectorized or provided with warning lights as indicated previously in this
- Manual.
 - 6. Where equipment is intermittently backing into the traveled way, flaggers are not generally needed provided that traffic

volumes are light, speeds are low and adequate sight distance is available to allow a vehicle to stop safely if necessary.